

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application.

**Listing of Claims:**

**Claim 1 (Cancelled)**

**Claim 2 (Previously Presented):** The method of Claim 5, wherein the mesenchymal stem cells are autologous to the hematopoietic progenitor cells.

**Claim 3 (Previously Presented):** The method of Claim 5, wherein the mesenchymal stem cells are allogeneic to the hematopoietic progenitor cells.

**Claim 4 (Previously Presented):** The method of Claim 5 further comprising separating the transformed human progenitor cells from the mesenchymal stem cells.

**Claim 5 (Currently Amended):** A method for transforming hematopoietic progenitor cells to express a protein, comprising co-culturing human hematopoietic progenitor cells with human mesenchymal stem cells isolated that have been isolated, purified and culturally expanded from human mesoderm tissue, and transforming the human hematopoietic progenitor cells with a polynucleotide comprising exogenous genetic material encoding a protein in the presence of the isolated human mesenchymal stem cells, wherein said protein is expressed.

**Claim 6 (New):** A method for transforming hematopoietic progenitor cells to express a protein, comprising co-culturing human hematopoietic progenitor cells with human mesenchymal stem cells that have been isolated, purified and culturally expanded from a bone marrow specimen by adding the bone marrow specimen to a

to a medium which contains factors which stimulate mesenchymal cell growth without differentiation, and transforming the human hematopoietic progenitor cells with a polynucleotide comprising exogenous genetic material encoding a protein in the presence of the isolated human mesenchymal stem cells, wherein said protein is expressed.